PHOTOFACT* Folder

*TRADE MARK

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RCA VICTOR MODELS SS-6, SS-8, STR-6, STR-8 (Ch. RS-166, RS-167)

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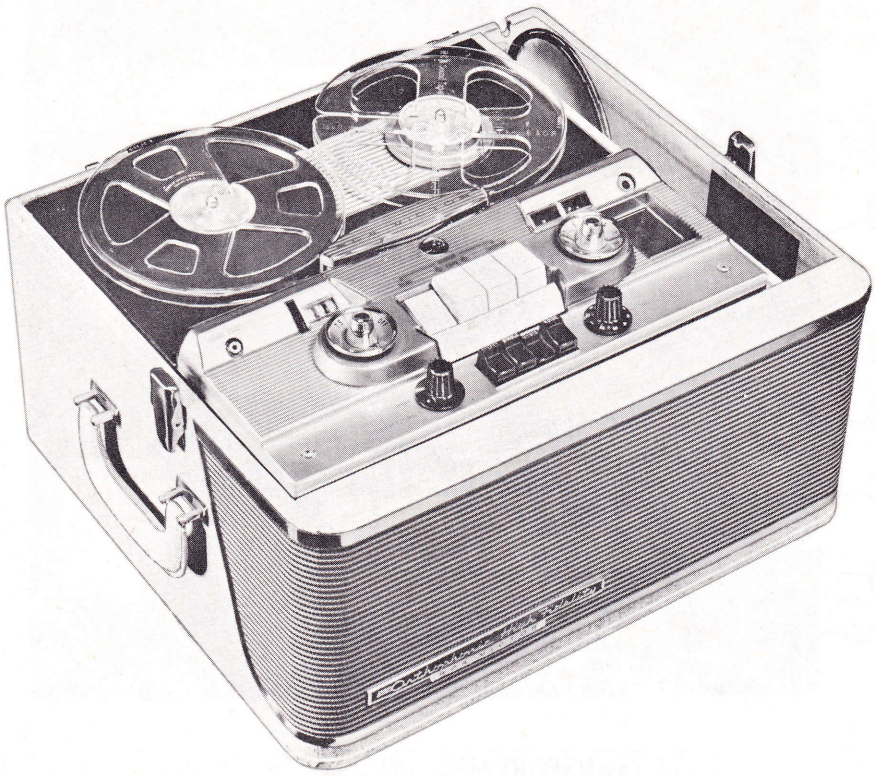

GENERAL INFORMATION

The RCA Models STR-6 and STR-8 tape recorders reproduce stereophonic sound from prerecorded stereophonic tapes. Conventional tapes (either half-track or full track) may also be used. In addition, the recorder will make monaural recordings.

The amplifier has two channels, each channel having four stages of playback amplification. Switching in the third stage permits full power output with either stereophonic or conventional tapes.

Tape motion is controlled by three push buttons and a Stop bar. A fourth push button (Monitor) actuates the record-playback switches only. When this fourth push button is depressed, the recording level may be set before the tape is set into motion.

These recorders operate from a 60-cycle, 115-volt, AC supply only. Before connecting to your line supply, be absolutely certain the supply agrees with the foregoing specifications.

RCA VICTOR MODELS SS-6, SS-8, STR-6, STR-8 (Ch. RS-166, RS-167)

Manufactured by:

Radio Corporation of America
RCA Victor Radio and "Victrola" Division
Camden 8, New Jersey

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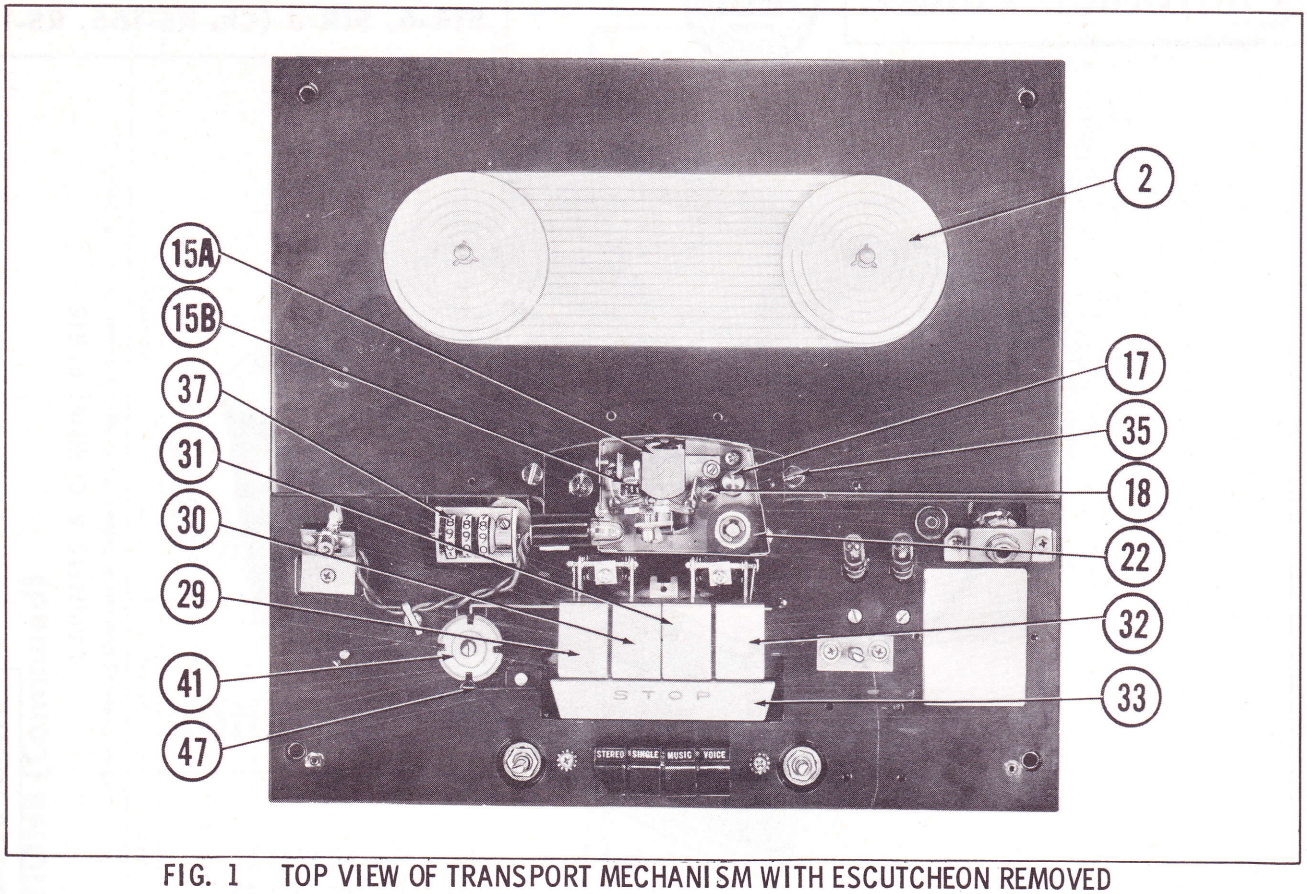


FIG. 1 TOP VIEW OF TRANSPORT MECHANISM WITH ESCUTCHEON REMOVED

SPECIFICATIONS

Tape Used

1/4" stereo (twin-track, in-line) or conventional (half-track or full track)

Tape Speeds

3 3/4 or 7 1/2 ips

Power Supply

115 volts, 60 cycles, 150 watts

Power Output (Each Channel)

Undistorted, 3 watts; maximum, 4.5 watts.

Frequency Response

70 to 15,000 cycles from prerecorded tape

Bias and Oscillator Frequency

60 kc ± 5 kc

OPERATING INSTRUCTIONS

Stereophonic Playback

Stereophonic tape recordings for in-line heads are required. A right-channel speaker system must be connected to Right Channel speaker jack.

1. Turn Stereo-Single/Mark switch to Stereo-Single position.
2. Depress Stereo push button.
3. Depress Play push button.
4. Adjust Loudness and Tone controls.

NOTE: Voice and Music push buttons have no effect during playback and may be set in any position.

Monaural Playback (Half-Track or Full Track)

1. Same as "Stereophonic Playback" except Step 2. In Step 2, depress Single instead of Stereo push button.

Monaural Recording from Microphone or Radio-Phono Jack

1. The Radio-Phono jack of Models STR-6 and STR-8 can be used for monaural playback or recording when connected to the output of an amplifier.

2. Turn Stereo-Single/ Mark switch to Stereo-Single position.

3. Depress Voice or Music push button, depending on the type of material being recorded.

4. Depress Monitor push button and set recording level. Recording level indication is given by two neon bulbs. Adjust the recording level indicators by rotating the Loudness control. For proper adjustment, the Normal indicator just flashes. When the Loudness control is advanced too far, the Overload indicator will flash, and the recording will be distorted.

To prevent overload, lower the Loudness control until the Overload indicator does not flash.

5. Hold down the Monitor push button and at the same time depress the Play push button.

NOTE: Single and Stereo push buttons, and Tone control have no effect during recording and may be set in any position.

Public Address Recording

These recorders can be used with a public address system in the following manner:

1. Insert microphone output plug into Microphone jack.

2. Insert high-impedance input of public address amplifier into Radio-Phono jack.

3. Turn Stereo-Single/ Mark switch to Stereo-Single position.

4. Depress Monitor push button and adjust recording level.

5. Depress Voice or Music push button, as desired.

6. To start recording, hold down the Monitor push button and at the same time depress the Play push button.

High-Speed Forward or Rewind Push Button

1. To rapidly advance the tape, depress the push button with the arrow pointing to the right. This push button is the High Speed Forward control.

2. To rapidly reverse the tape, depress the push button with the arrow pointing to the left. This push button is the High Speed Rewind control.

Stop Bar

1. This control stops the tape motion. Always depress the Stop bar before depressing any push button.

2. The Stop bar should be depressed before turning the Power-Speed control.

Tape Counter

Tape counter (37) provides complete selectivity and immediate location of any part of a recorded tape. By turning the counter to zero before beginning each reel, the numerals on the counter will serve as a ready reference to any portion of the recorded tape.

To Erase Tape

When the Monitor and Play push buttons are depressed, the erase head is automatically positioned, erasing any previous recordings while a new one is being made. Material no longer needed may be erased, without recording, by depressing the Monitor and Play push buttons and turning the Loudness control to its minimum position. One track is erased at a time. To erase the second track, reverse the reels and repeat the foregoing procedure.

Power-Speed Control

This control turns on the recorder and at the same time selects the desired recording or playing speed.

DISASSEMBLY INSTRUCTIONS

To Remove Tubes

Model STR-6: Remove cabinet bottom and leg assembly from cabinet by removing eleven wood screws.

Model STR-8: Remove plate (screen) from bottom of cabinet by removing six wood screws.

To Remove Tape Transport Mechanism from Cabinet

1. Remove screen or cabinet bottom as described in "To Remove Tubes."

2. Disconnect speaker leads.

3. Remove control knobs.

4. Remove four screws holding escutcheon and lift off escutcheon.

5. Remove microphone housing (8), secured by two screws.

6. Remove four mounting screws at corners of motorboard (12).

7. Remove power cord by removing clamp at rear of storage compartment. Push power cord through hole in cabinet.

8. Grip tape transport mechanism with fingers at opening in motorboard (12) and lift.

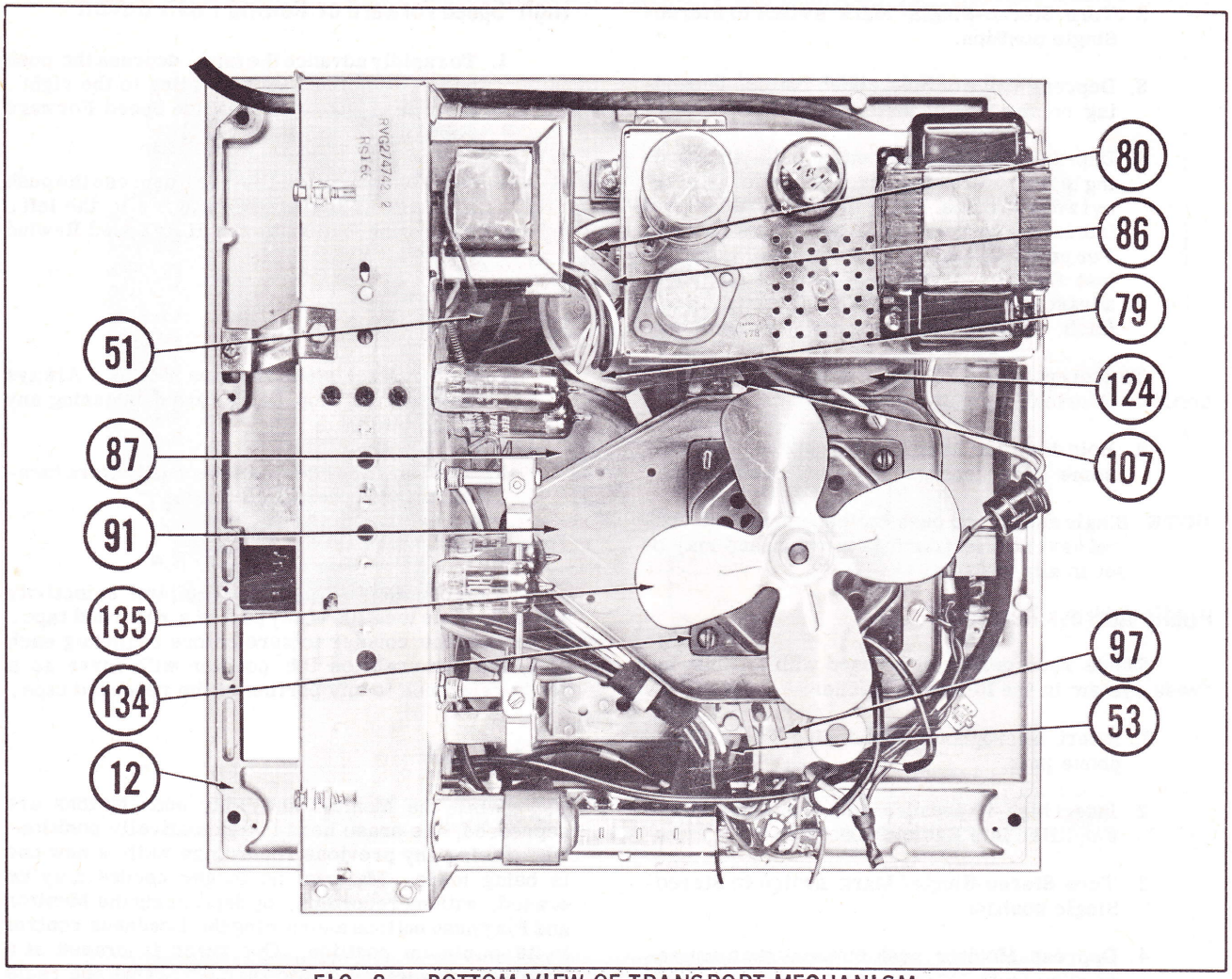


FIG. 2 BOTTOM VIEW OF TRANSPORT MECHANISM

To Remove Amplifier Chassis from Tape Transport Mechanism

1. Remove tape transport mechanism, as described in "To Remove Tape Transport Mechanism from Cabinet."
2. Remove pilot lamp socket from its mounting bracket.
3. Disconnect playback and erase head connectors, and power socket.
4. Remove two screws holding radio/phono input jack to motorboard. Push bracket through hole in motorboard.
5. Remove hex nut holding microphone input jack to bracket on motorboard.
6. Remove screws holding amplifier chassis to motorboard.

MECHANICAL ADJUSTMENTS

Brake Arms

Right-hand brake arm (65) and left-hand brake arm (98) should engage their drive pulleys (51) and (124) with the same force and at the same time. The brake pads should contact the pulleys with the maximum pad area. This is accomplished by bending the end of brake release slide (67). To gain access to the end of brake release slide (67), remove main drive pulley (79).

Tape Pressure Roller

Tape pressure roller (22) and capstan shaft (17) control the pressure on the tape. This pressure is derived mainly from pressure roller arm formed spring (57) on tape pressure roller arm (48). One of the mounting holes on pressure roller arm formed spring (57) is slotted to permit adjustment. The spring tension is determined by measuring the force necessary to pull the tape past capstan shaft (17). With the recorder stopped and Play push button depressed, a tension of 32 ounces should be required to cause tape slippage. Too much pressure will make the latch difficult to depress in the Play position.

Erase head (15B) should be so positioned that its face is parallel with the holes in mounting bracket (15C) and parallel to the tape. The vertical height of the head should be 0.584", measured from the mounting bracket to the top of the erase head gap. If the head is too high, the recording may not be erased completely; if the head is too low, part of the lower track may be erased.

Record-Playback Head

1. Thread a standard frequency tape (RCA 12-5-61T or equivalent) on the tape recorder. Connect output meter across left-channel speaker lead terminals.
2. Record-playback head (15A) should be so positioned that the front of the head is parallel to the edge of mounting bracket (15C).
3. Adjust right-hand tape guide post (18) for maximum output while playing the 1,000-cycle portion of the tape. Adjust left-hand tape guide post (18) so that the tape is approximately level across front of head. Repeat right-hand tape guide post (18) adjustment.
4. Adjust right-hand head mounting screw (15R) for maximum output. Left-hand head mounting screw (15L) must be tight.

Recording Level Indicator

Recording level settings are obtained by two neon bulbs, Type NE-51. Adjustment of these bulbs are necessary only when the bulbs or components in these circuits are replaced. The firing level on the recording indicator is adjusted by means of two adjustable controls (R3) and (R4). The controls are accessible after the cabinet bottom cover is removed.

To adjust firing level of recording indicators, the mechanism must be in the cabinet. Refer to Fig. 3 for location of adjustments.

1. Connect an audio signal generator to the radio-Phono jack. Set generator frequency to approximately 1,000 cycles.
2. Connect a VTVM to test point TP-3.
3. Depress Monitor push button.
4. Ground test point TP-1. Adjust generator output and/or tape recorder Loudness control to provide approximately 2.3 volts rms reading on the VTVM.
5. Remove ground from test point TP-1 and adjust Normal indicator control (R4) by turning counterclockwise and then clockwise until the Normal neon bulb barely lights.
6. Ground test point TP-1. Adjust generator output and/or tape recorder Loudness control to provide approximately 6.8 volts rms reading on the VTVM.
7. Remove ground from test point TP-1 and adjust Overload indicator control (R3) by turning counterclockwise and then clockwise until the Overload neon bulb barely lights.

Gain Control

Gain control (R5) enables the volume level of the external speakers to be equalized with the volume level of the internal speakers.

To set the gain control:

1. Thread a standard frequency tape on the recorder.
2. Connect an output meter across the terminals of the left channel speaker contained in the recorder.
3. Turn on recorder and allow to warm up for several minutes. Set volume control at normal playing position. Set switch (M9) to Stereo-Single.
4. Depress the Stereo and Play push buttons and, while playing the 1,000-cycle part of the tape, note the output meter reading.
5. Depress Stop bar and reverse tape reels to turn tape upside down.
6. Disconnect the output meter from the recorder and connect to the terminal of right channel speaker contained in the companion speaker unit.
7. Depress the Stereo and Play push buttons and, while playing the 1,000-cycle part of the tape, note the output meter reading.
8. Adjust gain control (R5) to obtain the same indication on the output meter as was noted in Step 7. For location of gain control, refer to Fig. 3.

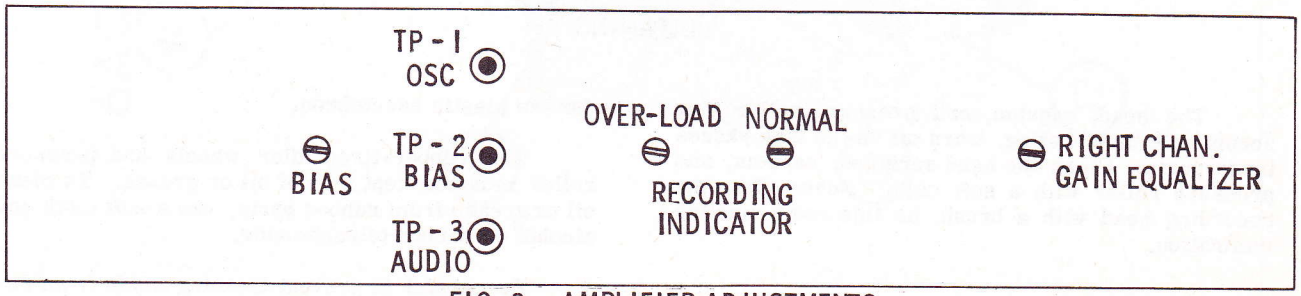


FIG. 3 AMPLIFIER ADJUSTMENTS

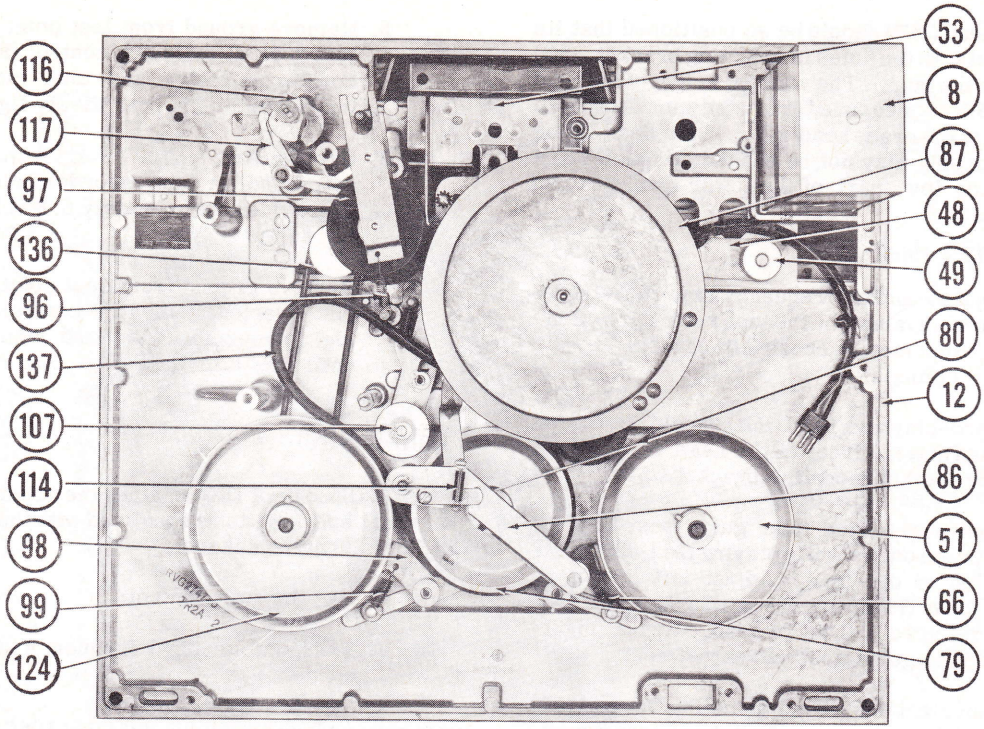


FIG. 4 BOTTOM VIEW OF TRANSPORT MECHANISM WITH MOTOR AND AMPLIFIER REMOVED

Recording Bias Voltage

Recording bias is obtained from the oscillator circuit of V4 and L1 and applied to the recording signal at the head input. The recording bias level requires adjustment only when a component in the oscillator head circuit is replaced or if C27 adjustment is altered.

To adjust recording bias level, the recorder must be in the cabinet. For location of adjustments, refer to Fig. 3.

1. Depress Monitor push button and allow recorder to warm up.
2. Connect a calibrated oscilloscope from test point TP-2 to chassis ground.

NOTE: Use a low-capacity probe with the oscilloscope in order to minimize circuit loading.

3. Adjust C27 for an indication of 195 volts peak-to-peak on the oscilloscope.

NOTE: The bias signal is 60 kc and cannot be accurately measured with an audio output meter.

Oscillator Frequency and Output Level

The oscillator frequency is 60 kc ± 5 kc and is obtained by adjusting oscillator coil L1.

The oscillator output is used for both the recording bias and erase voltage. To adjust recording bias level, see "Recording Bias Voltage." Erase voltage requires no adjustment, but should be greater than 500 volts peak-to-peak as measured at the junction C27 and C31 with a calibrated oscilloscope.

NOTE: A low-capacity probe must be used with the oscilloscope in order to minimize circuit loading.

CLEANING

The head, capstan, and pressure roller may accumulate tape coating, worn off as the tape passes these parts. Clean the head surfaces, capstan, and pressure roller with a soft cloth. Never clean the recording head with a brush, as this could mar the lamination.

Occasionally clean any foreign matter from under the plastic escutcheon.

The rubber-tired idler wheels and pressure roller must be kept free of oil or grease. To clean oil or grease from rubber parts, use a soft cloth and alcohol or carbon tetrachloride.

Be careful to prevent cleaning fluids from removing the lubricant from Oilite bearings.

LUBRICATION

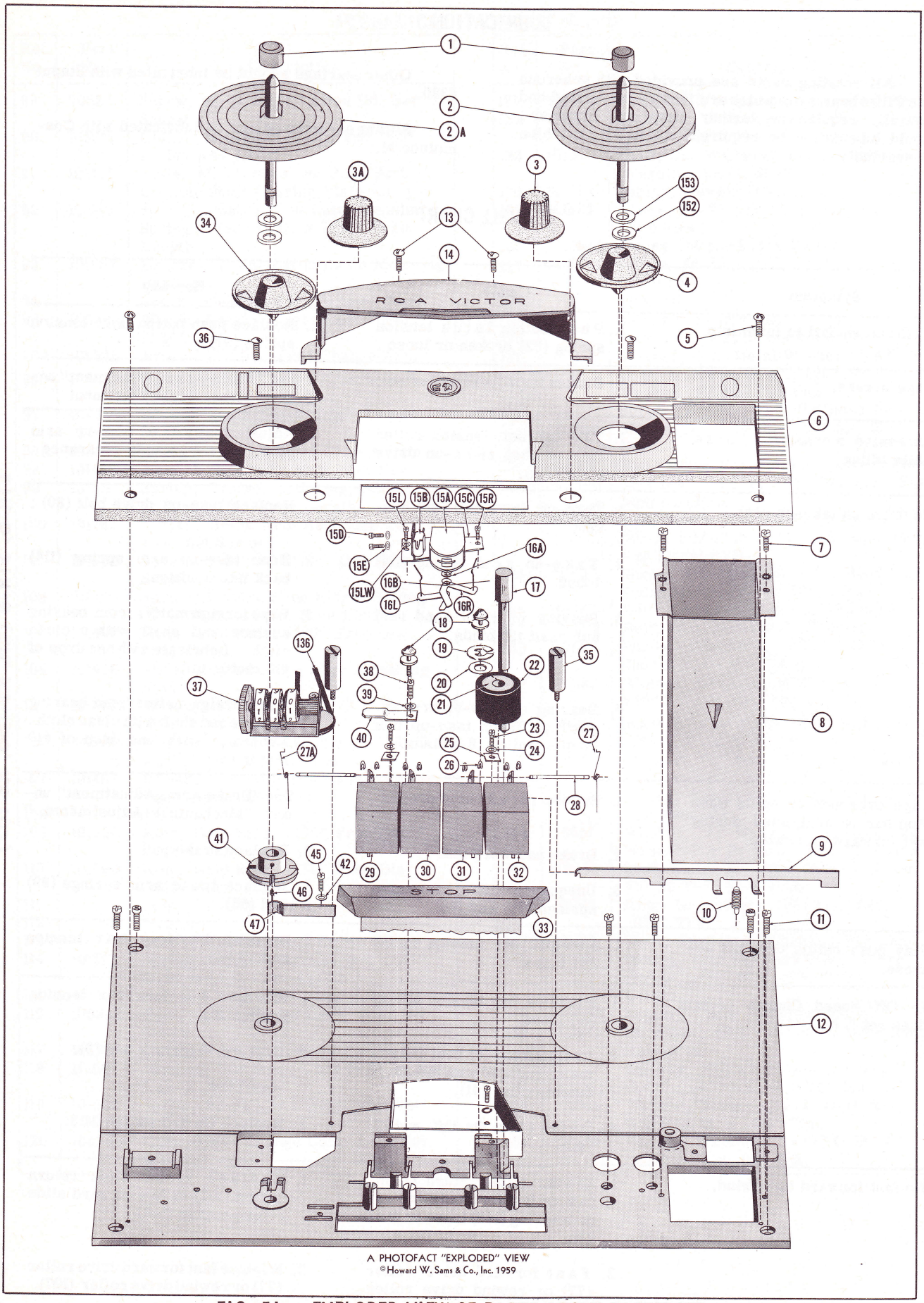
All rotating parts are provided with generous size Oilite bearings, which are factory lubricated and normally require no further attention. However, should lubrication be required, use sewing machine oil sparingly.

Other bearings should be lubricated with Staput #320.

Sliding surfaces should be lubricated with Cosmolube #1.

TROUBLE CHART

Symptom	Cause	Remedy
Push buttons fail to latch into position.	1. Push button latch tension spring (92) broken or loose.	1. Replace push button latch tension spring (92).
Tape breaks.	1. Brakes improperly adjusted.	1. See "Brake Arms Adjustment" under "Mechanical Adjustment."
Excessive mechanical noise while idling.	1. Take-up belt tension roller (84) touches take-up drive pulley (51).	1. Adjust position of take-up arm stop (111) to provide clearance.
No drive on take-up reel.	1. Take-up drive belt (80) broken.	1. Replace take-up drive belt (80).
	2. Take-up arm spring (114) loose.	2. Hook take-up arm spring (114) back into position.
	3. Bearing of right-hand reel hub shaft (2) binds.	3. Wipe foreign matter from bearing surface and shaft with a clean cloth. Lubricate with one drop of #10 motor oil.
	4. Bearing of take-up arm assembly (86) or take-up belt tension roller (84) binds.	4. Wipe foreign matter from bearing surface and shaft with clean cloth. Lubricate with one drop of #10 motor oil.
Tape overruns or spills when Stop bar is depressed during fast forward or rewind.	1. Brakes not adjusted properly.	1. See "Brake Arms Adjustment" under "Mechanical Adjustments."
	2. Brake pad worn out.	2. Replace brake pad.
	3. Unequal tension of brake arm springs (99) and (66).	3. Replace brake arm springs (99) and (66).
Play push button does not depress.	1. Interlock bar tension spring (10) loose.	1. Refasten interlock bar tension spring (10).
On-Off/ Speed Change control does not turn.	1. Interlock bar tension spring (10) loose.	1. Refasten interlock bar tension spring (10).
	2. Interlock bar (9) bent and remains engaged with interlock detent collar (41).	2. Re-form interlock bar (9).
	3. Defective On-Off switch M13.	3. Replace On-Off switch M13.
No fast forward or rewind.	1. Rewind slide return spring (102) or fast forward slide return spring (148) loose or broken.	1. Replace rewind slide return spring (102) or fast forward slide return spring (148).
	2. Fast forward drive roller (77) or rewind drive roller (107) missing.	2. Replace fast forward drive roller (77) or rewind drive roller (107).



A PHOTOFACT "EXPLODED" VIEW

FIG. 5A EXPLODED VIEW OF PARTS ABOVE BASEPLATE

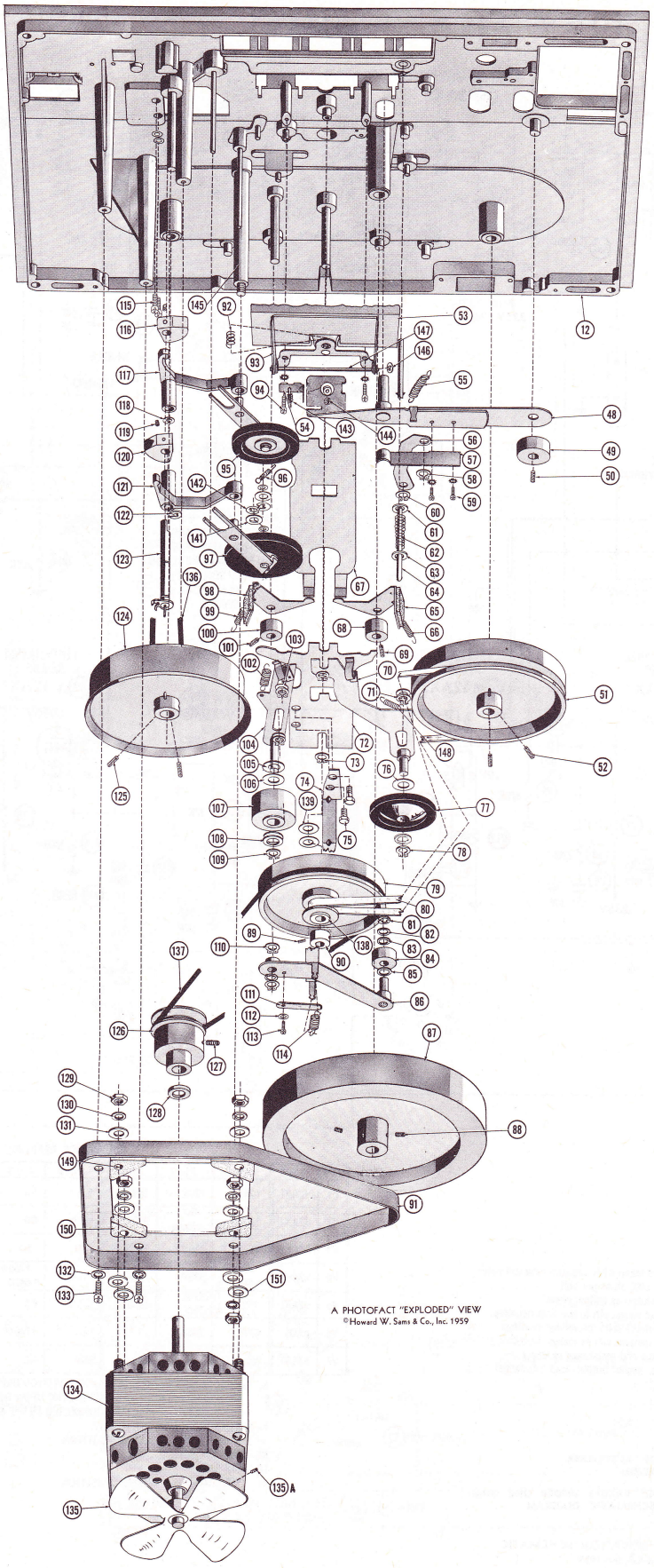
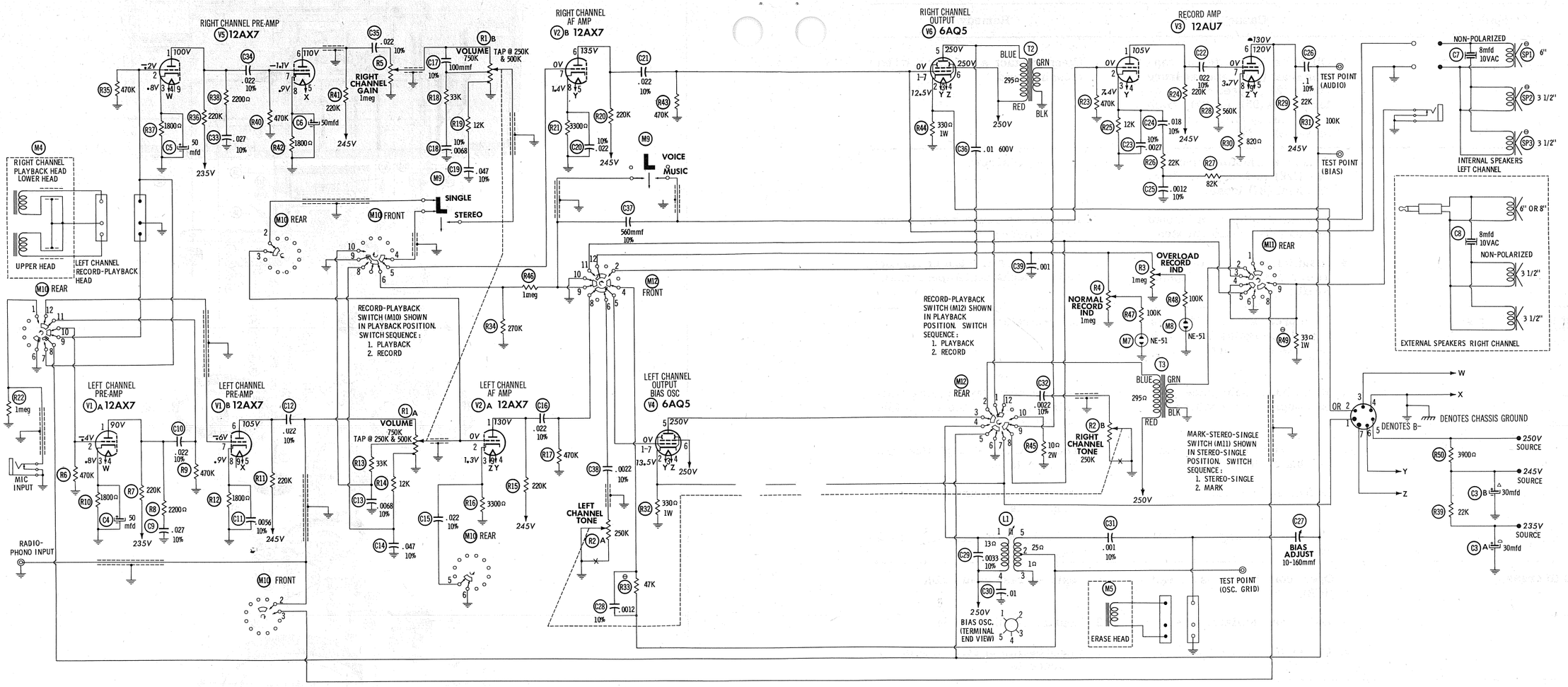


FIG. 5B EXPLODED VIEW OF PARTS BELOW BASEPLATE



ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12AX7	†245K	470K	1800Ω	5.5Ω	0Ω	†220K	470K	1800Ω	NC
V2	12AX7	†220K	0Ω ▪ 1meg	3300Ω	5.5Ω	0Ω	†220K	0Ω ▪ 270K	3300Ω	5.5Ω
V3	12AU7	†220K	470K	12K	.1Ω	.1Ω	†26K	560K	820Ω	.1Ω
V4	6AQ5	470K ▪ 47K	330Ω	.1Ω	.1Ω	†760Ω ▪ 480Ω	†470Ω	470K ▪ 47K		
V5	12AX7	†245K	470K 20Ω	1800Ω	5.5Ω	0Ω	†220K	470K	1800Ω	NC
V6	6AQ5	470K	330Ω	.1Ω	.1Ω	†760Ω	†470Ω	470K		
V7	5Y3GT	NC	¶	TP	86Ω	NC	92Ω	NC	¶	

RESISTANCE READINGS

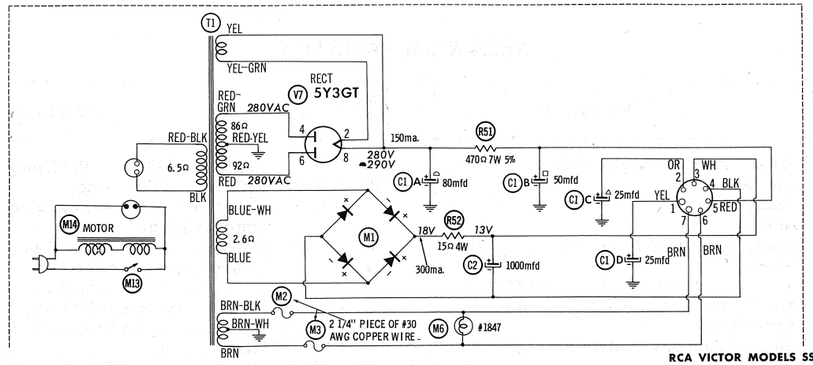
ALL MEASUREMENTS TAKEN IN "PLAY" POSITION UNLESS OTHERWISE DESIGNATED.
¶ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC CAPACITOR CONNECTED IN THE ASSOCIATED CIRCUIT.
† MEASURED FROM PIN 8 OF V7.
▪ MEASURED IN "RECORD" POSITION.
NC NO CONNECTION
TP TIE POINT
▪ MEASURED IN "RECORD" POSITION

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of ±15% in voltage and resistance readings.
6. All controls at minimum, proper output load connected.

Θ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFACT STANDARD NOTATION SCHEMATIC



RCA VICTOR MODELS 5S-6, 5S-8, STR-6, STR-8 (Ch. RS-166, RS-167)

TROUBLE CHART (Con't)

Symptom	Cause	Remedy
Speed variation, or wow.	1. Oil or foreign matter on capstan shaft (17), tape pressure roller (22), speed change idler wheels (95) and (97), main drive pulley (79), and main drive belt (137).	1. Clean contact surfaces with cleaning fluid.
	2. Setscrew in motor drive pulley (126) and capstan drive flywheel (87) loose.	2. Tighten setscrew.
	3. Pressure roller arm formed spring (57) loose or broken .	3. Replace pressure roller arm formed spring (57).
	4. Insufficient tape pressure roller pressure on capstan shaft (17).	4. See "Pressure Roller Adjust- under "Mechanical Adjustments."
Fails to record or play.	1. Tape pressure pad (54) fails to hold tape against heads due to missing return spring (143).	1. Replace return spring (143).
	2. Right-hand tape guide post (18) improperly positioned .	2. See "Record-Playback Head Adjustment" under "Electrical Adjustments."
	3. Open circuit in head or connecting cable.	3. If head and connecting cable are open, replace.
	4. Defect in amplifier circuit.	4. Check amplifier circuit for faulty components.
	5. Record actuating rod (64) missing.	5. Replace Record actuating rod (64).
Fails to erase.	1. Open coil in erase head (15B).	1. Replace erase head (15B).
	2. Defective oscillator tube.	2. Replace oscillator tube.
	3. Defect in oscillator circuit.	3. Check oscillator circuit for faulty components.

MECHANICAL PARTS LIST

Ref. No.	Part No.	Description
1	76787	Retainer, Tape Reel Retainer (Rubber)
2	105409	Shaft, Right-Hand Reel Hub And Shaft Ass'y.
2A	105410	Shaft, Left-Hand Reel Hub And Shaft Ass'y.
3	105584	Knob, Tone Control Knob (Brown)
3A	105585	Knob, Mark/Stereo-Single Control Knob (Brown)
4	105608	Knob, Loudness Control Knob (Suntan Gold
5		Screw, #6-32 x 3/4" Fil. Hd.
6	105591	Escutcheon, Front Control Panel Escutcheon
7		Screw, #6-32 x 3/16" Binding Head
8	101707	Microphone Housing
9	101483	Interlock, Fast Forward or Rewind Interlock Bar
10	101514	Spring, Interlock Bar Tension Spring
11		Mounting Screws (4)
12	105612	Motorboard, Motorboard Subassembly
13		Screw, #8-32 x 1/2" Long
14	105589	Escutcheon, Record-Play-Erase Head Escutcheon
15A	103277	Head, Record-Play Head With Male Connector
15B	105362	Head, Erase Head With Male Connector

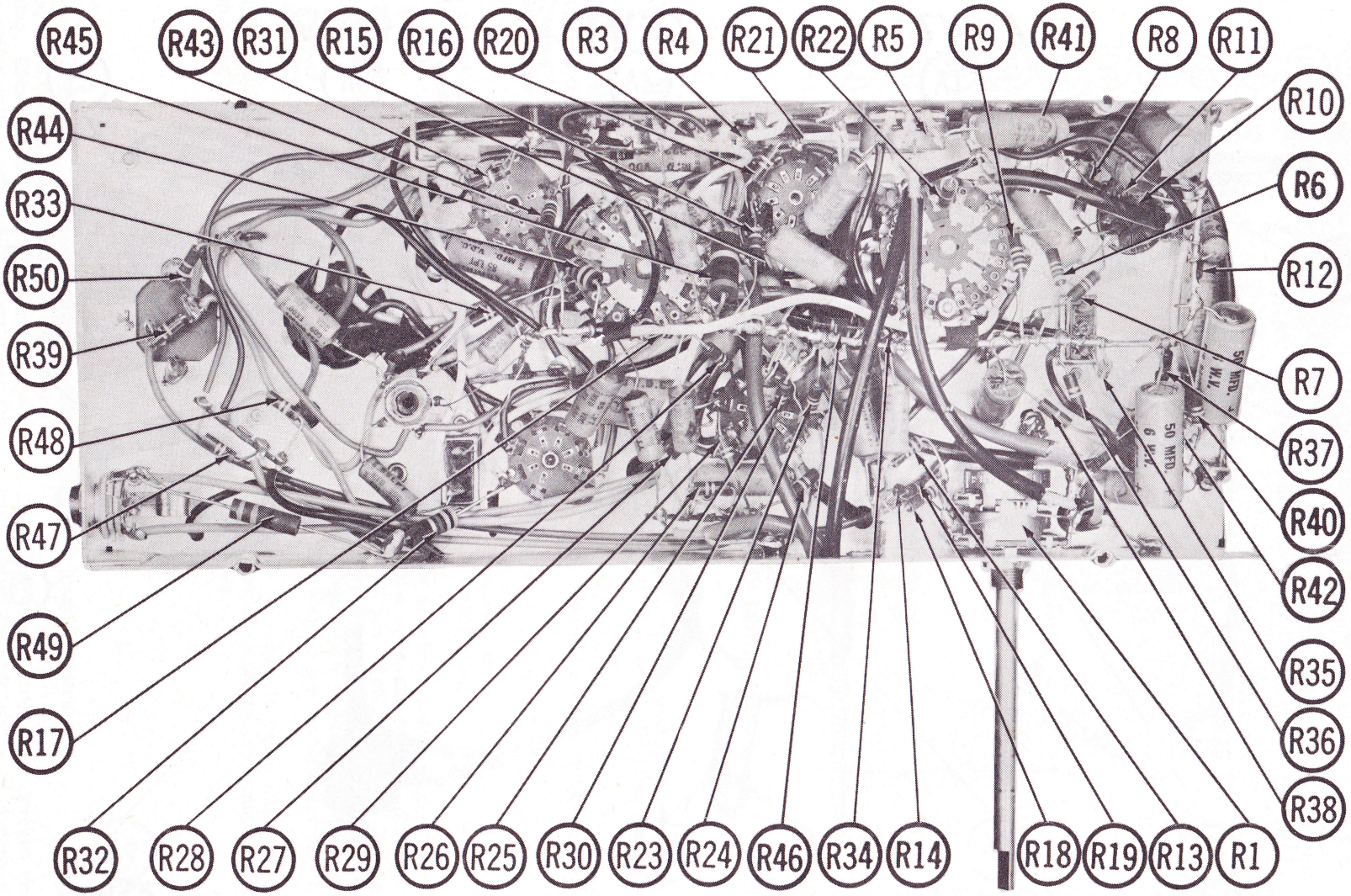
Ref. No.	Part No.	Description
15C	105505	Bracket, Mounting Bracket For Record-Play Head And Erase Head
15D		Screw, #2-56 x 1/8" Round Head
15E		Washer, #2 Internal Tooth Lockwasher
15L		Screw, #6-32 x 1/4" Fillister Head
15R		Screw, #6-32 x 5/16" Fillister Head
15LW		Washer, #6 Split Lockwasher
15RW		Washer, #6 Flat Washer
16A	78651	Washer, "C" Type Retaining Washer
16B	105385	Spring, Formed Spring For Tape Hold-out Lever
16L	105363	Lever, Tape Hold-out Lever (Left Hand)
16R	105364	Lever, Tape Hold-out Lever (Right Hand)
17	101474A	Shaft, Capstan Shaft, For 60 Cycle Operation Only
18	101493	Post, Tape Guide Post, Adjustable (2)
19	103157	Retainer, "C" Washer, Retainer For Tape Pressure Roller
20	101507	Washer, Flat Metal, 1/2" O.D. x 252" I.D. x .010" Thk.
21	101523	Washer, Cambric, .437" O.D. x 255" I.D. x .005" Thk.
22	101475	Roller, Tape Pressure Roller, For 60 Cycle Operation Only
23		Screw, #6-32 x 1/4" Fillister Head
24		Washer, #6 Split Lockwasher
25	101487	Retainer, Push-Button Assembly Shaft Retainer, 3/8" x 13/32" x .0478" Thk.
26	101517	Ring, Grip Ring .118" Free Dia., .025" Thk.
27	103345	Spring, Monitor Button Return Torsion Spring
27A	101744	Spring, Torsion Play Button Return Spring
28	101486	Shaft, Pivot Shaft For Push-Button Ass'y.
29	105592	Button, "Play" Button And Cam Assembly (Antique White)
30	105593	Button, "Rewind" Button And Cam Assembly (Antique White)
31	105594	Button, "Fast Forward" Button And Cam Assembly (Antique White)
32	105595	Button, "Monitor" Button Assembly (Antique White)
33	105611	Bar, Stop Bar, Plastic Bar Only
34	105609	Knob, Speed Selection Control Knob (Suntan Gold)
35	101956	Post, Tape Guide Post, Fixed (2)
36		Screw, #6-32 x 3/8" Long
37	101480	Counter, Tape Counter With Knurled Knob And Pulley
38		Screw, #6-32 x 1/4" Fillister Head
39		Washer, #6 Split Lockwasher
40		Bracket, Pilot Lamp Bracket
41	101481	Collar, Interlock Detent Collar, Die Cast
42		Washer, #6 Split Lockwasher
45		Screw, #6-32 x 3/16" Fillister Head
46	14974	Screw, Set Screw, #8-32 x 3/16" For Interlock Detent Collar
47	101454	Spring, Speed Change Detent Spring
48	105383	Arm, Tape Pressure Roller Arm
49	101448	Collar, Pressure Roller Arm Retaining Collar, Less Set Screw
50	101592	Screw, #8-32 x 1/4" Cup Point Set Screw
51	103271	Pulley, Take-up Drive Pulley
52	101592	Screw, #8-32 x 1/4" lg. Cup Point Set Screw
53	101477	Latch, Push-Button Release Latch And Bar Assembly
54	105384	Pad, Tape Pressure Pad Assembly With Felt Pad
55	103253	Spring, Pressure Roller Arm Return Spring, .218" O.D. x 11/16" Free Length
56	101957	Support, Pressure Roller Arm Support Plate
57	101450	Spring, Pressure Roller Arm Formed Spring
58	101500	Ring, Grip Ring .180" Free Dia., .035" Thk.
59		Screw, #6-32 x 3/16" Fillister Head
60	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
61		Washer
62		Spring
63		Washer
64		Rod, Record Actuating Rod
65	101499	Arm, R.H. Brake Arm With Pad
66	101511	Spring, Brake Arm Spring, .218" O.D. x 11/16" Free Length
67	101446A	Slide, Brake Release Slide
68	101767	Collar, Brake Arm Retaining Collar, Less Set Screw
69	101592	Screw, #8-32 x 1/4" Lg. Cup Point Screw
70	105393	Slide, Fast Forward Drive Roller Actuating Slide Ass'y.
71	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
72	103341	Slide, Pressure Roller Arm Actuating Slide
73	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
74	103346	Bracket, Take-up Spring Mounting Bracket
75		Screw, #6 x 1/4" Hex Hd. Tapping Screw
76	101502	Washer, Phenolic, 1/2" O.D. x .188" I.D. x .010" Thk.
77	101492	Wheel, Fast Forward Drive Roller, Rubber Tired
78	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
79	103282	Pulley, Main Drive Dual Pulley Ass'y.
80	103283	Belt, Take-up Drive Belt, Flat Fabric
81	101517	Ring, Grip Ring, .118" Free Dia., .025" Thk.
82	100196	Washer, Flat Washer, .240" O.D. x .130" I.D. x .005" Thk.
83	100198	Washer, Cambric Washer, .240" O.D. x .130" I.D. x .005" Thk.
84	103275	Roller, Take-up Belt Tension Roller
85	100198	Washer, Cambric Washer, .240" O.D. x .130" I.D. x .005" Thk.
86	103276	Arm, Take-up Arm Assembly
87	101476A	Flywheel, Capstan Drive Flywheel
88	101592	Screw, #8-32 x 1/4" Lg. Cup Point Set Screw

MECHANICAL PARTS LIST (Con't)

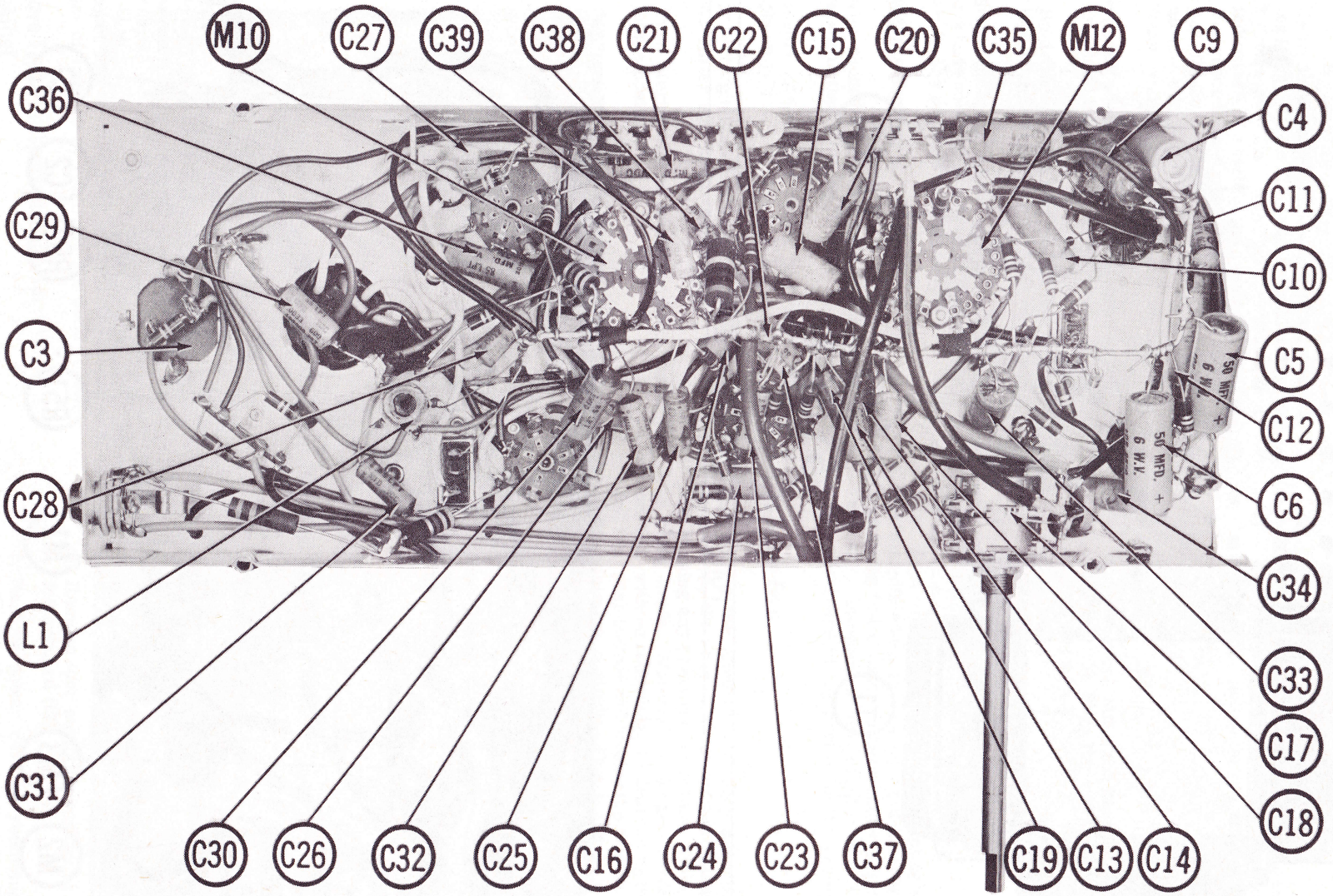
Ref. No.	Part No.	Description
89	70527	Screw, #6-32 x 1/ 8" Allen Hd. Set Screw
90	105617	Collar, Retaining Collar For Dual Pulley Ass'y.
91	101459	Plate, Motor Mounting Plate And Capstan Shaft Bearing Plate Ass'y.
92	101515	Spring, Push-Button Latch Tension Spring, .343" O.D. x 7/16" Free Length
93	101452	Bracket, Push-Button Latch Mounting Bracket
94		Screw, #6-32 x 1/ 4" Fillister Head
95	105387	Wheel, Speed Change Idler Wheel (7 1/ 2 ips)
95A	105366	Arm, 7 1/ 2 ips Speed Change Arm
96	105391	Spring, Speed Change Arm Return Spring
97	105386	Wheel, Speed Change Idler Wheel (3 3/ 4 ips)
97A	105367	Arm, 3 3/ 4 ips Speed Change Arm
98	101497	Arm, L.H. Brake Arm With Pad
99	101511	Spring, BrakeArm Spring, .218" O.D. x 11/ 16" Free Length
100	101767	Collar, Brake Arm Retaining Collar, Less Set Screw
101	101592	Screw, 8-32 x 1/ 4" Lg. Cup Point Screw
102	71099	Spring, Rewind Slide Return Spring .187" O.D. x 3/ 4" Free Length
103	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
104	101456	Slide, Rewind Drive Idler Actuating Slide
105	101502	Washer, Phenolic, 1/ 2" O.D. x .188" I.D. x .010" Thk.
106	74078	Washer, Cambric Washer, .328" O.D. x .195" I.D. x .005" Thk.
107	101467	Roller, Rewind Drive Roller, Die Cast Aluminum
108		Washer
109	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
110	101500	Ring, Grip Ring, .180" Free Dia., .035" Thk.
111		Stop, Take-up Arm Stop
112		Washer
113		Screw, Take-up Arm Screw
114	101512	Spring, Take-up ArmSpring, .187" O.D. x 7/ 8" Free Length
115		Screw, Counter Mounting Screws
116	105338	Cam, Speed Change Cam, Less Set Screw
117	105389	Lever, 7 1/ 2 ips Change Lever
118	101508	Washer, "C" Ring, .282 O.D. x .114" I.D. x .025" Thk.
119	101592	Screw, #8-32 x 1/ 4" Cup Point Set Screw
120	105388	Cam, Speed Change Cam, Less Set Screw
121	105390	Lever, 3 3/ 4 ips Speed Change Lever
122	101508	Washer, "C" Ring, .282" O.D. x .114" I.D. x .025" Thk.
123	105359	Shaft, Speed Change and On-Off Switch Operating Lever Shaft
124	101468	Pulley, Rewind Drive Pulley
125	101592	Screw, #8-32 x 1/ 4" Lg. Cup Point Set Screw
126	101473A	Pulley, Motor Drive Pulley
127	101592	Screw, #8-32 x 1/ 4" Lg. Cup Point Set Screw
128		Washer
129		Nut, #10-32 Hex Nut
130		Washer, #10 Split Lockwasher
131		Washer, Flat Metal Washer, 1/ 2" O.D. x .198" I.D. x 1/ 32" Thk.
132		Washer, #10 Split Washer
133		Screw, #10-32 x 3/ 8" Fillister Head
134	105350	Motor, Drive Motor, 115 Volt, 60 Cycle
135	101462	Fan, Motor Fan, Aluminum With #10-32 x 1/ 4" Set Screw, 5" Diameter For Motor STR-8
	10543	Fan, Motor Fan, Aluminum With #10-32 x 1/ 4" Set Screw, 5" Diameter For Model STR-8
135A	101589	Screw, #10-32 x 1/ 4" Allen Head Cup Point Set Screw For Motor Fan
136	101457	Belt, Counter Drive Belt (Rubber)
137	105392	Belt, Main Drive Belt (Rubber)
138	101523	Washer, Cambric, .437" O.D. x 255" I.D. x .010" Thk.
139	101591	Washer, Phenolic, 1/ 2" O.D. x 250" I.D. x .010" Thk.
141	78719	Washer, Flat Metal .312" O.D. x .190" I.D. x .010" Thk.
142	101508	Washer, "C" Ring (Retainer), .282" O.D. x .114" I.D. x .025" Thk.
143	105370	Spring, Return Spring For Pressure Pad Assembly
144	78651	Washer, "C" Washer Type Retaining Washer For Pressure Pad Assembly
145	101496	Stud, Motor Mounting Stud, 3" Long, #10-32 Thd. Both Ends
146	101517	Ring, Grip Ring, .118" Free Dia., .025" Thk.
147	101516	Shaft, Push-Button Latch Pivot Shaft
148	71099	Spring, Fast Forward Slide Return Spring, .187" O.D. x 3/ 4" Free Length
149	105358	Spacer, Motor Mounting Spacer
150	103948	Grommet, Motor Mounting Grommet, Rubber (4)
151		Washer, Flat Metal Washer, 1/ 2" O.D. x .198" I.D. x 1/ 32" Thk.
152	101591	Washer, Phenolic, 1/ 2" O.D. x 0.250" I.D. x .010" Thk.
153	101523	Washer, Cambric, .437" O.D. x .255" I.D. x .005 Thk.

AMP CHASSIS - TOP VIEW

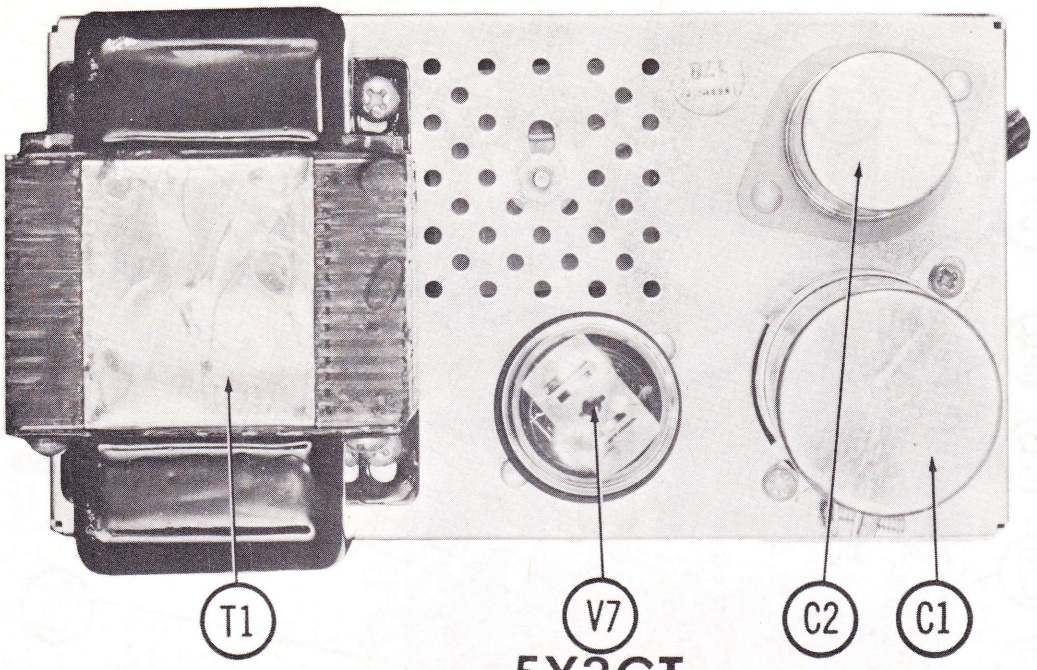
RCA VICTOR MODELS SS-6, SS-8, STR-6, STR-8 (Ch. RS-166, RS-167)



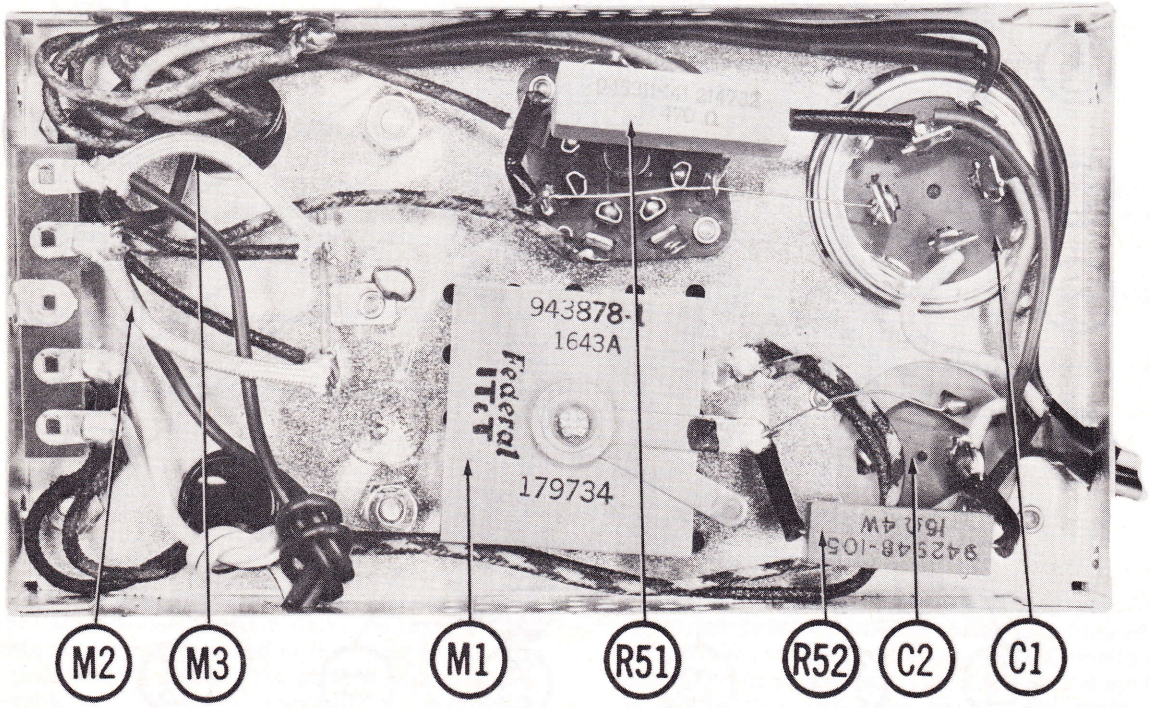
AMP CHASSIS BOTTOM VIEW - RESISTOR IDENT.



AMP CHASSIS BOTTOM VIEW - CAPACITOR, INDUCTOR & MISC. IDENT.



POWER CHASSIS - TOP VIEW



POWER CHASSIS - BOTTOM VIEW

ELECT. PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	Left Channel Preamp.	12AX7	
V2	AF Amplifier	12AX7	
V3	Record Amplifier	12AU7	
V4	Left Channel Output - Bias Osc.	6AQ5	
V5	Right Channel Preamp.	12AX7	
V6	Right Channel Output	6AQ5	
V7	Rectifier	5Y3GT	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	RATING VOLT.	REPLACEMENT DATA RCA Victor PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1A	▲80	400	103259	AFH4-57-50	D0478	FP420.54		D-255	R2438 *
B	■50	400						MTD-0220	
C	▲25	25							
D	25	25							
C2	1000	15	103257	AFH1-02	A0060	WP039	TMS-4	S-020	TVL-1165
C3A	▲30	250	105596	AFH2-54	D0340	FP376.6 TC72		T-085	R2721 *
B	▲30	250							
C4	50	6	78573	SRE6V50	BBR50-6	TT6X50	TD-50-6	MQ-650	TVA-1100
C5	50	6	78573	SRE6V50	BBR50-6	TT6X50	TD-50-6	MQ-650	TVA-1100
C6	50	6	78573	SRE6V50	BBR50-6	TT6X50	TD-50-6	MQ-650	TVA-1100
C7	8	10VAC	100509	AC-PRS10V8	BBR16-90 † BBR16-90 †	TC108	TD-16-150 † TD-16-150 †	MT-1516 † MT-1516 †	R2201 *
C8	8	10VAC	100509	AC-PRS10V8	BBR16-90 † BBR16-90 †	TC108	TD-16-150 † TD-16-150 †	MT-1516 † MT-1516 †	R2201 *

* Not normally in distributors stock. Available through distributor on order to manufacturer.
† Connect negative leads together.

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C9	.027	400	103131					5BF-S27	10%
C10	.022	400	103351					5BF-S22	10%
C11	.0056	200	102086				GEM-16256	5BF-D56	10%
C12	.022	400	73562					5BF-S22	10%
C13	.0068	200	105577				GEM-16268	5BF-D68	10%
C14	.047	200	105578					2WF-S47	10%
C15	.022	200	103726					2WF-S22	10%
C16	.022	400	103351					5BF-S22	10%
C17	100		101853	NPO-SI 100	D6-101	L10T1	ZT-531	5GA-T1	10%
C18	.0068	200	105577				GEM-16268	5BF-D68	10%
C19	.047	200	105578					2WF-S47	10%
C20	.022	200	103726					2WF-S22	10%
C21	.022	400	103351					5BF-S22	10%
C22	.022	400	103351					5BF-S22	10%
C23	.0027	200	105576					5BF-D22	10%
C24	.018	400	105580					5BF-S18	10%
C25	.0012	400	105579					5BF-D12	10%
C26	.1	400	78922					5BF-P10	10%
C27	10-160		105574						
C28	.0012	200	103332					5BF-D12	10%
C29	.0033	600	102174				GEM-16233	6TM-D33S	10%* 10%
C30	.01	400	102384	P488N-01	D6-103	CUB4S1	GEM-411	4TM-S1	
C31	.001	400	102426				GEM-1621	5BF-D1	10%
C32	.0022	400	102079					5BF-D22	10%
C33	.027	400	103131					5BF-S27	10%
C34	.022	400	103351					5BF-S22	10%
C35	.022	400	103351					5BF-S22	10%
C36	.01	600	102221A	P688N-01	D6-103	CUB6S1	GEM-611	6TM-S1	
C37	560	.	105581		D6-561			MS-356	10%
C38	.0022	400	102079					5BF-D22	10%
C39	.001	400	102426A				GEM-1621	6TM-D1	

* Not normally in distributors stock. Available through distributor on order to manufacturer.

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA RCA Victor PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
R1A	750K	½	105599					Volume, Tap ⓐ 250K & 500K
B	750K	½						Volume, Tap ⓐ 250K & 500K
R2A	250K	½	105600	BB-103	AD47-250K-Z†	Q13-130		Tone, Left Channel
B	250K	½				M13-130		Tone, Right Channel
R3A	1meg	½	102421	AB-69	B47-1meg-S	B11-137	TA16L	Overload, Recording Ind.
B	Shaft			AK-1	Not Req.	SK2	Not Req.	
R4A	1meg	½	102421	AB-69	B47-1meg-S	B11-137	TA16L	Normal, Recording Ind.
B	Shaft			AK-1	Not Req.	SK-2	Not Req.	
R5A	1meg	½	103260	AB-69	B47-1meg-S	B11-137	TA16L	Right Channel Gain
B	Shaft			AK-1	Not Req.	SK-2	Not Req.	

† Use FS-3 Shaft.

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING OHMS	RATING WATT	RCA Victor PART No.	NOTES
R6	470K		502447	
R7	220K		502422	
R8	2200Ω		502222	
R9	470K		502447	
R10	1800Ω		502218	
R11	220K		502422	
R12	1800Ω		502218	
R13	33K		502333	
R14	12K		502312	
R15	220K		502422	
R16	3300Ω		502233	
R17	470K		502447	
R18	33K		502333	
R19	12K		502312	
R20	220K		502422	
R21	3300Ω		502233	
R22	1meg		502510	
R23	470K		502447	
R24	220K		502422	
R25	12K		502312	
R26	22K		502322	
R27	82K		502382	
R28	560K		502456	
R29	22K		502322	

ITEM No.	RATING OHMS	RATING WATT	RCA Victor PART No.	NOTES
R30	820Ω		502182	
R31	100K		502410	
R32	330Ω	1	502133	
R33	47K		502347	
R34	270K		502427	
R35	470K		502447	
R36	220K		502422	
R37	1800Ω		502218	
R38	2200Ω		502222	
R39	22K		502322	
R40	470K		502447	
R41	220K		502422	
R42	1800Ω		502218	
R43	470K		502447	
R44	330Ω	1	502133	
R45	10Ω	2	522010	
R46	1meg		502510	
R47	100K		502410	
R48	100K		502410	
R49	33Ω	1	502033	
R50	3900Ω		502239	
R51	470Ω 5%	7(WW)	105583	
R52	15Ω	4(WW)	103285	

COILS

ITEM No.	USE	REPLACEMENT DATA RCA Victor PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	NOTES
L1	Bias Osc. Trans.	105607					

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	REPLACEMENT DATA RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T1	117V ⓐ .73A	520VCT ⓐ .150A	18V ⓐ .3A	105598						
	SEC. 3	SEC. 4	SEC. 5							
	5V ⓐ 1.8A	6.3VCT ⓐ 1.5A								

ELECT. PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA							NOTES
	PRI.	SEC.	RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	5700Ω	3-4Ω	105597	Z1109	A-2935	AU-609	A-8092 ①	26S49 ①	S-5X	① Drill new mounting hole.
T3	5700Ω	3-4Ω	105597	Z1109	A-2935	AU-609	A-8092 ①	26S49 ①	S-5X	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	RCA Victor PART No.	QUAM PART No.	
SP1	6"	PM	3-4Ω	100464 ①	6A21	① Used in Models STR-8, SS-8
SP2	3½"	PM	6-8Ω	105395 ②	3A15TZ6.4	② Used in Models STR-6, STR-8, SS-6, SS-8
SP3	3½"	PM	6-8Ω	105395 ②	3A15TZ6.4	③ Used in Models STR-6, SS-6
	8"	PM	3-4Ω	78597 ③	8A21	

SELENIUM RECTIFIER

ITEM No.	RATING	REPLACEMENT DATA				NOTES
	CURRENT (Measured)	RCA Victor PART No.	FEDERAL PART No.	INTERNATIONAL PART No.	SARKES TARZIAN PART No.	
M1	.300A	103258	1643A	C1B	304B	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			RCA Victor PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M2	#30AWG Copper Wire	2 1/4" Long						
M3	#30AWG Copper Wire	2 1/4" Long						

MISCELLANEOUS

ITEM No.	PART NAME	RCA Victor PART No.	NOTES
M4	Head	103277	Record-Play, Includes Male Connector
M5	Head	105362	Erase, Includes Male Connector
M6	Lamp	103211	#1847
M7	Lamp	101857	NE51
M8	Lamp	101857	NE51
M9	Switch	105588	Stereo/Single-Voice/Music (Slide Type)
M10	Switch	105606	Record-Playback (Rotary Wafer Type)
M11	Switch	105586	Mark, Stereo/Single (Rotary Wafer Type)
M12	Switch	105605	Record-Playback (Rotary Wafer Type)
M13	Switch	101484	On-Off
M14	Motor	105350	
	Microphone	105590	Includes Cable

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	105585	Mark, Stereo/Single
Knob	105609	Speed Selection
Knob	105584	Tone
Knob	105608	Loudness
Pushbutton	105601	Music
Pushbutton	105602	Stereo
Pushbutton	105603	Single
Pushbutton	105604	Voice
Pushbutton	105592	Play (Includes CAM Assembly)
Pushbutton	105593	Rewind (Includes CAM Assembly)
Pushbutton	105594	Fast Forward (Includes CAM Assembly)
Pushbutton	105595	Assembly, Monitor
Handle	105744	
Cabinet	X4299	Black Mink, Complete With Hardware, Model STR-6
Cabinet	X4297	Maple, Complete With Hardware, Model STR-6
Cabinet	X4295	Mahogany, Complete With Hardware, Model STR-6
Cabinet	X4296	Oak, Complete With Hardware, Model STR-6
Cabinet	X4298	Walnut, Complete With Hardware, Model STR-6
Cabinet	X4301	Complete with Hardware, Model STR-8
Leg	Z-3733	

WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)
1725-K (7½ Ft. Length)

Low-Loss Shielded Lead (Interconnecting) .....Use BELDEN No. 8401

Phono Pick-up Arm Cable ..... Use BELDEN No. 8430 (Two Conductor - Twisted)